第３講 英語長文演習③

次の英文を読んで，下記の設問に答えよ。

In the 1980s, Japan began to invest heavily in industrial robots and office automation. In the car industry, this policy gave it an early advantage. Japanese assembly lines became almost fully automated at a time when American and European ones were still crowded with workers. For office tasks, automation was less successful, because office teamwork had to be *open-ended and could less well be programmed ahead. A third important area of robot applications exists in an area of help, interaction and advice. Here, values and feelings are central, and what is wanted from the robot is happiness, in the form of health, comfort, satisfaction, enjoyment or security. A simple example of enjoyment would be watching the dancing of a group of *ASIMO robots. In itself, this is not a new activity. In both East and West, *automata have existed for centuries.

(ア) More novel, however, are robots that interact with humans. In the late 1990s, there was a series of *crazes for virtual or robot pets which human owners had to care for. One of the first and simplest was the Tamagotch, of 1996. This was a screen game in which the object was to keep the pet alive and well by monitoring its health, making adjustments to its diet and exercise, and showing it affection. (イ) This was a revolutionary idea at a time when most electronic games were about winning or destroying.

NOTE

After the Tamagotch came a generation of stand-up or walk-around pets such as the American Furby in 1998 and the Japanese AIBO dog, in 1999. (ウ) These pets made use of functions from artificial intelligence research, including face and voice recognition, and had built-in growth programs. Furby learned to speak English over time, and, in a second series after 2005, also how to react with emotion. AIBO could be trained to learn a vast range of actions, as it grew from a young dog up to old age in accordance with the "memory stick" that controlled its lifetime. Another robot of this sort, a baby dinosaur called PLEO, came out in 2006 and was remarkable for touch sensors all over its body, which made its movements smooth and realistic and its skin pleasant to feel.

It was soon realized that (エ) apart from (オ) making good pets, robots of this sort could be used for animal therapy. People who are unable to react easily with others sometimes find that contact with an animal can be a bridge to building human relations, and a robot pet can fulfill, (カ) the same use, without smell or hair. The most successful robot of this kind (キ) so far was a baby *seal called PARO, designed in Japan in 1993, and put on public view in 2001.

NOTE

A next step would then be partner robots for home therapy. In Japan, one went on sale in 2008. It is called “ifbot,” 45cm tall, and dressed as an astronaut. In appearance, it is like a *Martian, with attentive and upward-directed eyes but no visible mouth. Its voice is described as “slow, polite, and easy to talked to,” it raises a hand to its ear and “listens carefully before trying to answer.” When not talked to, it lets out occasional calls of friendly concern.

*open-ended 数・量などが決められていない
ASIMO 人間型・二足歩行のロボット　automata 自動的に動くもの
craze 熱狂的大流行　seal アザラシ　Martian 火星人

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NOTE

問 1　下線部（ア）を日本語に訳しなさい。

問 2　下線部（イ）に関して，筆者が考える理由として最も適切なものを，A ～ D のうちから一つ選べ。

A. 自動的に歩いたり踊ったりするロボットは，東洋でも西洋でも長い間現れなかったこと。

B. 勝ち負けではなく，愛情を持ってスクリーンの中のペットの世話をするゲームであったこと。

C. オフィスの作業の自動化は，ロボットの登場によって大いに前進したこと。

D. ロボットの利用においては，従来から価値や感情が重要な位置を占めていたこと。

問 3　下線部（ウ）に関して，筆者が挙げている具体例として最も適切なものを，A ～ D のうちから一つ選べ。

A. Furby は英語教育用ロボットとして開発されている。

B. AIBO はその生涯を制御するメモリーによって子犬から成長する。

C. 訓練によっては非常にさまざまな行動を学習し，自分の体をきれいに拭くロボットがいる。

D. なかには体の一部に触れると色が変わる赤ちゃん用ロボットもある。

問４　下線部（エ）の意味に最も近いものを，A ～ D のうちから一つ選べ。

A. I saw the man at the station, standing apart from the rest of the people seeing off.

B. We didn’t see anyone all day, apart from a couple of girls on the beach.

C. Apart from teaching as a football coach, he also runs a chain of sports shops.

D. I hardly know anyone in town apart from Brown and you.

問５　下線部（オ）の意味に最も近いものを，A ～ D のうちから一つ選べ。

A. becoming　B. keeping　C. forcing　D. arranging

問６　下線部（カ）の内容として最も適切なものを，A ～ D のうちから一つ選べ。

A. Robots are sometimes very useful in making them help to build a bridge and a hospital.

B. There are some people who never mind interacting with others, but prefer staying at home.

C. A robot pet can be used for curing those who find it difficult to build relationship with others.

D. A robot pet without smell or hair is liked far better for some reason.

問７　下線部（キ）の意味に最も近いものを，A ～ D のうちから一つ選べ。

A. almost always　B. until now　C. hardly ever　D. most likely

問８　本文の内容に合致するものをＡ～Ｄのうちから一つ選べ。

A. All the intelligent robots can stand up or walk around, but cannot be programmed to recognize human face or voice yet.

B. After the screen game of the Tamagotch, a variety of intelligent robots appeared and were found to be useful for animal therapy before long.

C. Those who cannot interact easily with others never hope to have partner robots for home use.

D. The smooth and realistic movements of a robot pet are always necessary to make children believe that a Martian exists somewhere in space.

第３講　　　　　　　　　　　　　　　　解答

＜解答＞

問１　全訳の下線部を参照。　問２　B　問３　B　問４　C

問５　A　問６　C　問７　B　問８　B

＜全訳＞

　1980 年代に，日本は工業ロボットやオフィスオートメーションに多額の投資をし始めた。自動車産業は，この方針によって早期の利点を手にした。日本の組立てラインは，アメリカやヨーロッパの組立てラインがまだ労働者でごった返していた時に，ほぼ完全に自動化した。オフィスの仕事では，自動化はあまり成功しなかった，というのもオフィスの協同作業は数・量が決められていないので，前もってしっかりとプログラムできなかったからだ。ロボットの利用で三番目に重要な分野は，援助や交流，そして助言が必要な分野だ。ここでは，価値や感情が中心にあり，ロボットに求められるものは，健康，快適さ，満足度，娯楽，安全という形態の幸せだ。娯楽の単純な例は，ASIMO の集団が踊っているのを見ることだろう。それ自体は新しい活動ではない。東洋と西洋の両方で，自動的に動くものは何世紀も存在していた。

　しかし，もっと斬新なのは，人間と交流するロボットだ。1990 年代後半に，人間の飼い主が世話をしなければならない，仮想，あるいはロボットのペットの一連の熱狂的な大流行があった。その最初でもっとも単純なものの一つが，1996 年のたまごっちだった。これはスクリーンに映し出されるゲームで，その目的はペットの健康を監視して，食事や運動を調節して，愛情を注いで，ペットを健康に育てるものだった。ほとんどの電子ゲームが勝利することや何かを破壊することに関するものだった時代に，これは画期的なアイデアだった。

　たまごっちの後に，1998 年のアメリカのファービー人形や 1999 年の日本の AIBO のように，立ち上がって歩き回るペットの時代がやってきた。こういったペットは，顔認識，音声認識を含んだ人工知能研究の機能を利用していて，内蔵の成長プログラムを持っていた。ファービーは徐々に英語を話すようになり，2005 年以降の第二弾では，感情を持って反応する方法も身に付けていた。AIBO は，その一生をコントロールする「メモリースティック」に従い，子犬から老犬にまで成長しながら，非常に幅広い行動を身に付けるように訓練することができた。この種のもう一つのロボットは PLEO と呼ばれる恐竜の赤ちゃんだが，2006 年に出現し，体全体にあるタッ

チセンサーによって，その動きを滑らかに現実的なものにして，肌触りを良くするもので，注目すべきものだった。

まもなくして，この種のロボットは良いペットになるだけではなく，アニマルセラピーに利用することができるとわかった。他人とかかわるのが容易ではない人にとって，時に動物と触れ合うことが人間関係を築く架け橋になる可能性があるとわかっており，ロボットのペットは，においや髪の毛もなくて，同じ使い方ができる。今までのところ，この種のロボットで最も成功していたのは，1993 年に日本で設計されて，2001 年に大衆にお披露目された PARO という赤ん坊のアザラシであった。

次の段階は，ホームセラピーのパートナーとなるロボットだろう。日本では 2008 年に販売が開始されたものがあった。「ifbot」と呼ばれるもので，身長が 45 センチで，宇宙飛行士の服装をしている。見た目は火星人のようであり，注意深く上向きの目を持っていたが，目に見える口はなかった。その声は「ゆっくりと礼儀正しく，なじみやすい」と言われて，耳のところに手を挙げて，「答えようとする前に注意深く聞いている」。話しかけられないと，友好的な関心を示す呼び出し音をときどき発する。

第３講 重要語彙リスト ＊一つ一つ何度も繰り返して，覚えてください

1	invest	投資する
2	automation	オートメーション，自動化
3	advantage	利点
4	assembly line	組立てライン
5	fully	完全に
6	crowded	混雑した
7	ahead	前もって
8	application	利用
9	interaction	交流
10	form	形態
11	comfort	快適さ
12	satisfaction	満足
13	enjoyment	娯楽
14	security	安全
15	in oneself	それ自体で
16	novel	斬新な
17	a series of	一連の
18	care for	世話をする
19	object	目的
20	monitor	監視する
21	make adjustment	調節する
22	diet	食事
23	exercise	運動
24	affection	愛情
25	revolutionary	画期的な，革命的な
26	electronic	電子の
27	generation	時代，世代
28	make use of	利用する
29	function	機能
30	artificial intelligence	人工知能
31	voice recognition	音声認識
32	react	反応する
33	a range of	様々な
34	in accordance with	～と一致して
35	dinosaur	恐竜
36	remarkable	注目すべき
37	smooth	滑らかに
38	apart from	～だけではなく
39	relation	関係
40	so far	今までのところ

第３講 音読用白文 ① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨ ⑩

In the 1980s, Japan began to invest heavily in industrial robots and office automation. In the car industry, this policy gave it an early advantage. Japanese assembly lines became almost fully automated at a time when American and European ones were still crowded with workers. For office tasks, automation was less successful, because office teamwork had to be open-ended and could less well be programmed ahead. A third important area of robot applications exists in an area of help, interaction and advice. Here, values and feelings are central, and what is wanted from the robot is happiness, in the form of health, comfort, satisfaction, enjoyment or security. A simple example of enjoyment would be watching the dancing of a group of ASIMO robots. In itself, this is not a new activity. In both East and West, automata have existed for centuries.

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